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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/395,845 | 09/14/1999 | LIH-JYH WENG | 101058-0042 | 6554 |

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CESARI AND MCKENNA, LLP
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BOSTON, MA 02210

EXAMINER

YUFA, ALEKSANDR L

| ART UNIT | PAPER NUMBER |
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2133

DATE MAILED: 09/10/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/395,845

Applicant(s)

WENG, LIH-JYH

Examiner

Alex L. Yufa, Ph.D.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 September 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings Figs. 4-6 are objected to as failing to comply with 37 CFR 1.84(p)(4).

New corrected drawings are required in this application because:

- a) all means, presented on Figs. 4, 5 and 6, should be numbered;

The corrected drawings are required in reply to the Office action.

Claim Objections

1. Claims 4, 23, 24 are objected to because of the following informalities:

- a) claim 4 (line 1) recites the limitation "means a means" is indefinite and fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- b) claim 23 (line 1) recites the limitation "an to update" is indefinite and fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- c) claim 24 (line 2) recites the limitation of the step "E..".

Appropriate correction is required.

Claim Rejection

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 2-6, 8, 10, 12, 14-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification (and is not shown in the drawings) in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 2 includes limitations, such as: a second register, etc., which were not described in the specification .

Claim 3 includes limitation, such as: a selection means, which was not described in the specification .

Claim 4 includes limitation, such as: a selection means, which was not described in the specification .

Claim 5 includes limitations, such as: a selection means, means for combining, etc., which were not described in the specification .

Claim 6 includes limitation, such as: a decrypting subsystem, which was not described in the specification .

Claim 8 includes limitations, such as: means for detecting, means for removing, and others, which were not described in the specification.

Claim 10 includes limitation, such as: means for providing a key, which was not described in the specification .

Claim 12 includes limitations, such as: means for detecting, means for removing, which were not described in the specification

Claim 14 includes limitation, such as: means for providing a key, which was not described in the specification .

Claim 15 includes limitation, such as: adders, which were not described in the specification .

Claim 16 includes limitation, such as: a plurality of second multipliers, which was not described in the specification (e.g. in specification described: the multiplier 12 and "p" multipliers 12).

Claim 17 includes limitations, such as: an encryption means, means for producing, which were not described in the specification .

Claim 18 includes limitation, such as: a decrypting means, which was not described in the specification (applicant mentioned a decrypting subsystem in the rejected claim 6) .

Claim 19 includes limitation, such as: a selection means, which was not described in the specification .

Claim 20 includes limitations, such as: an encryption means, means for producing, which were not described in the specification .

Claim 21 includes limitation, such as: a decrypting means, which was not described in the specification (applicant mentioned a decrypting subsystem in the rejected claim 6) .

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-36 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,796,776 to Lomp et al.

Referring to claim 1, Lomp et al. teaches to use “random sequences using Galois Field mathematics” (column 8, lines 53, 54), “register 832, 833, 834, 835” (column 23, line 9), “multiplier 704, 705, 706” (column 21, line 59), “feedback” (column 3, line 49), and “feedback connection” (column 9, line 11).

Claims 2-22 as depended from respective claim 1, hence inherit the deficiency in claim 1. Also, according claims 2-22, Lomp et al. teaches to use “adders 213, 214, and 220” (column 10, line 66), “means for selecting” (see, e.g., column 47, line 47). Lomp et al. does not explicitly point out to DCH codes or encrypting/decrypting means, but Lomp et al. does not limit the type of codes or means further applicable to work with his device

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(e.g., such as encrypting decrypting means, etc.), and, for instance, inherently teaches that his device is intended and applicable to "large families of nearly mutually orthogonal codes" (column 3, lines 40, 41).

Referring to applicant's claim 23, Lomp et al. teaches to use a code sequence generator in a CDMA modem with the functional operation (additionally, with the mathematical formalization of the disclosed processes), including supplying the initial for "first register" /first memory means/ (e.g. see column 47, lines 29, 30 and 54), "producing a ... signal" (e.g. see column 47, line 31), "supplying a next symbol "i" of sequence" (e.g. see column 14, lines 10-55), updating "the first memory" /first memory means/ from one stage to the next stage /or last stage/ (e.g. see column 47, lines 53-55), "repeating" steps procedure (e.g. see column 47, line 60).

According applicant's claims 24-36, Lomp et al. teaches to multiply operations by multiplier (e.g. see column 23, line 67 and column 24, line 1), select operations (e.g. see column 47, line 47), combine operations (e.g. see column 48, lines 30-32), and other analogous steps presented in the applicant's claims 24-36.

Also, claims 24-36 as depended from respective claim 23, hence inherit the deficiency in claim 23.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

US 5,642,377

US 5,193,094

1. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

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on _____.
(Date)

Typed or printed name of person signing this certificate:

Signature: _____

Certificate of Transmission

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I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (703) _____ - _____ on _____.
(Date)

Typed or printed name of person signing this certificate:

Signature: _____

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Yufa whose telephone number is 703-305-0715.

The examiner can normally be reached on M-F 8:00am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on 703-305-9595. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-2394.

Alex L. Yufa, Ph.D.
Examiner
Art Unit 2133

ay

Greg J. Lamare
for

Albert DeCady
Primary Examiner